DOCUMENT RESUME

ED 441 586 PS 028 582

AUTHOR Deslandes, Rollande
TITLE Direction of Influence between Parenting Style and Parental Involvement in Schooling Practices, and Students' Autonomy: A Short-Term Longitudinal Design.
PUB DATE 2000-04-00
NOTE 19p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-28, 2000).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adolescent Behavior; Adolescent Development; *Adolescents; Foreign Countries; High School Students; High Schools; Longitudinal Studies; Models; *Parent Child Relationship; *Parent Participation; *Parent School Relationship; Parent Student Relationship; *Personal Autonomy; Predictor Variables
IDENTIFIERS *Parenting Styles; Quebec

ABSTRACT

This study examined the reciprocal influence between parenting style and parental involvement in schooling practices and adolescent autonomy over a 2-year period. Participating in the study were 872 adolescents with a mean age of 14.5 years at Time 1 and attending 5 French-speaking public high schools in Quebec, Canada. From the initial cohort, 676 adolescents participated in the 1-year follow-up (Time 2). Data were collected by means of the student questionnaires regarding their parents' parenting style and involvement and their own level of autonomy. The findings lent support to the effects of parenting style and parental involvement practices on autonomy over time. There were significant increases in autonomy from Time 1 to Time 2, specifically in work orientation and self-reliance, in parental psychological autonomy granting, and in parent-adolescent communication; there were also drops in parental warmth and parent-school communication. Parental affective support, a dimension of parental involvement in school, was rather stable over the 2-year span. Significant path coefficients lent support to the possibility of longitudinal, bidirectional effects between parenting and parental involvement behaviors and adolescents' autonomy. Perceived parental warmth was both a correlate and a contributor to autonomy, with a more important contribution to autonomy at Time 2. Psychological autonomy granting presented the same pattern, with a less important contribution to autonomy at Time 2. Affective support and parent-adolescent communication were more a correlate of autonomy than a contributor to it. (Contains 36 references.) (KB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

Direction of influence between parenting style and parental involvement in schooling practices, and students' autonomy: A short-term longitudinal design

ED 441 586

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Rollande Deslandes, Ph.D.[1]
CRIRES Research Center
Université du Québec à Trois-Rivières
Québec, Canada, G9A 5H7
Rollande_Deslandes@uqtr.uquebec.ca
http//:www.uqtr.uquebec.ca/~deslande

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
Rollande Deslandes
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

10th Annual International Roundtable on School, Family, and Community Partnerships,
AERA 2000 annual meeting program of the **Family-School-Community Partnership SIG**
April 2000, New Orleans, Louisiana

ABSTRACT

The current paper investigates the reciprocal influence between parental behaviors and adolescents development. The study shows increases mainly in adolescents' autonomy and more importantly, in adolescents' work orientation and self-reliance as well as in parental psychological autonomy granting, and decreases mainly in parent-school communication over a two-year period. Findings lend support to the effects of parenting style and parental involvement practices on students autonomy over time. At this point, the results of this study suggest that parents, through their warmth, autonomy support and affective support in schooling play an important role in the development of adolescents autonomy. At the same time, significant path coefficients lend support to the possibility of longitudinal, bidirectional effects between parenting and parental involvement behaviors and adolescents' autonomy.

INTRODUCTION

To acquire a greater sense of autonomy is the quintessential developmental task of the adolescent period (Eccles et al., 1997). Using a psychosocial perspective of autonomy, some researchers have found that adolescents autonomy is related to school achievement (e.g., Deslandes & Potvin, 1999; Greenberger, 1982; Lamborn et al., 1991; Linver & Silverberg, 1997; Steinberg, Elmen & Mounts, 1989). Age differences in autonomy and more particularly, in self-reliance and work-orientation, two aspects of autonomy, favor older adolescents over younger ones (Greenberger, 1984; Steinberg & Silverberg, 1986).

PS 028582

[1] The author wishes to thank Dr. Danielle Leclerc, Département de psychoéducation, UQTR, for her support in the statistical analyses.

BEST COPY AVAILABLE

A recent study conducted in the province of Quebec (Deslandes, 1998-2001) has suggested higher scores of autonomy associated with higher scores of parental warmth and psychological autonomy granting, two parenting style practices. Findings also indicated that more parental affective support and more frequent parent-adolescent communications, two parental involvement practices, predict adolescents autonomy. In contrast, more parent-adolescent daily interactions based on school matters predicted lower autonomy scores (Deslandes & Potvin, 1999; Deslandes, Potvin & Leclerc, in press).

In general, research results have shown that youngsters at higher grade levels report lower scores on measures of parental demandingness and responsiveness than youngsters at lower grades. They also reported lower levels of parental involvement in schooling (Linver & Silverberg, 1997; Mantzicopoulos & Oh-Hwang, 1998; Paulson & Sputa, 1996; Steinberg & Silverberg, 1986). Lee (1994), with data that came from 17,424 adolescents, found that compared to middle grades parents, high school parents are fewer to maintain communication with their adolescents and their adolescents' teachers, to attend a school event, to get involved in learning activities at home, to discuss about school and to attend a school meeting. However, there is relatively less decline in family discussion about school programs or courses from middle grades to high school.

With regard to the direction of effects between parenting style practices and adolescents autonomy (Bell, 1968, 1974; Belsky, 1984, Bugental & Goodnow, 1998), study results are not clear cut. For instance, Steinberg et al. (1989) reported that adolescents autonomy is likely to evoke parental warmth rather than the reverse whereas Steinberg et al. (1994) suggested that parenting style practices precede rather than simply follow from adolescent autonomy. At the same time, some authors proposed that student development might influence the types of parental involvement practices (Deslandes, 2000; Connors & Epstein, 1995; Epstein, 1996). Longitudinal studies are necessary to determine if differences in autonomy modulate the nature of parental practices required to foster school achievement. Apparently neither of the mentioned research groups examined simultaneously parenting style and parental involvement practices in relation to adolescents autonomy in a longitudinal study spanning more than 1 academic year.

OBJECTIVES

The first purpose of the study what to what examine changes in autonomy scores and in parenting style and parental involvement practices within a two-year period. The second one was to determine the direction of causality between parenting and parental involvement

practices and adolescents autonomy. As the first hypothesis, we proposed that parental warmth and psychological autonomy granting *time 1* would contribute to adolescents' autonomy *time 1* which in return, would evoke parental warmth and psychological autonomy granting *time 2* which would then result in higher autonomy *time 2*. As the second hypothesis, the same patterns of influence were proposed with parental affective support, daily interactions on school matters and parent-adolescent communication.

METHOD

Participants

The sample consisted of 872 adolescents with an average age of 14 years and a half (equivalent to Freshmen in U.S.A. school system) and attending five French-speaking public high schools in the province of Quebec. The present communication presents data from a 1-year follow-up of these adolescents. Data were available for 676 adolescents from the initial cohort.

Measures

Student Report of Autonomy (Greenberger, Josselson, Knerr, & Knerr, 1975). A translated and adapted version of the three 10-item subscales of the autonomy scale of the Psychosocial Maturity Inventory (Form D) was used (for more information on the transcultural validation, see Deslandes, Potvin & Leclerc, 1999). The scoring was based on a Likert scale, ranging from 1 (never) to 4 (very often). The work-orientation subscale measures the adolescent's work skills, aspirations for competent work performance, and capacity to experience pleasure in work. The internal reliability of this subscale in the present study was quite good (Cronbach's alpha was .85). A sample item from this subscale, reverse scored, is " I tend to go from one thing to another before finishing any one of them ". The self-reliance subscale assesses the absence of dependence on others, a sense of control, and self-initiative. A sample item, reverse code, is " The main reason I'm not more successful is that I have bad luck from this ". The internal reliability of this subscale was acceptable (Cronbach's alpha was .71). The identity subscale measures the adolescent's sense of self-esteem, concern with life goals, internatlization of values, and clarity of self-concept. A sample item, reverse scored, is "I can't really say what my interests are ". The internal reliability of this subscale was good (Cronbach's alpha was .83). The three subscales, self-reliance, work orientation and self-reliance, were shown to have good reliability and validity.

Student Report of Parenting Style (Steinberg, Lamborn, Dornbusch & Darling, 1992). This measure is a translated and adapted version of the three subscales developed by

Steinberg et al. (1992): warmth, supervision and psychological autonomy granting and used in previous studies (e.g., Deslandes, 1996; Deslandes, Bertrand, Royer & Turcotte, 1995; Deslandes et al., 1997). The three dimensions were recently assessed through confirmatory factorial analyses (Deslandes, Leclerc & Dumont, in preparation). The first subscale, entitled warmth, measures the extent to which the adolescent perceives his or her parents as loving, responsive, and involved (sample item: "I can count on my parents to help me out, if I have some kind of problem," 10 items; alpha= 86). The second subscale, called supervision, assesses parental monitoring of the adolescent (sample item: "Your parents really know what you do with your free time," 6 items; alpha= .80). The third subscale, labeled psychological autonomy granting, measures the extent to which parents employ democratic discipline and encourage the adolescent to express individuality with the family (sample item, reverse score: "My parents answer my arguments by saying something like 'You'll know better when you grow up,'" 8 items; alpha=.80).

Student Report of Parent Involvement (Epstein, Connors & Salinas, 1993, Q-3). A five-dimension scale was adapted from questionnaires designed by Epstein et al. (1993) and then, assessed through confirmatory factorial analyses (Deslandes et al., in preparation). The resulting subscales, which include twenty parental involvement activities, at home and at school, are labeled as follows: (a) affective support (sample item: "My mother gives me encouragement about school," 6 items, α= 0.82); (b) communication with the teachers (sample item: "My mother talks with my teachers on the phone," 4 items, α= 0.73); (c) parent-adolescent interactions based on daily school matters (sample item: "My mother asks if I did my homework," 4 items, α= 0.80); (d) parent-school communication (sample item: "A parent goes to a meeting for parents at the school," 3 items, α= 0.59); and (e) parent-adolescent communication (sample item: "My mother discusses with me about my future (work, studies)," 3 items, α = 0.65). Adolescents' perceptions of mothers' and fathers' involvement were measured, and then, averaged in order to obtain global parental scores.

Procedures

Data were collected in April 1998 and in April 1999. The self-report questionnaires took about 30 minutes to complete.

RESULTS

Table 1 contains the means, standard deviations of time 1 and time 2 of the parenting style, parental involvement in schooling and adolescents autonomy variables. As shown in table 1, paired tests *t* results (time 1 vs time 2) showed significant increases in adolescents autonomy,

more specifically in work orientation and self-reliance, in parental psychological autonomy granting and parent-adolescent communication and drops in parental warmth and parent-school communication. Parental affective support, a dimension of parental involvement in school, was found to be rather stable over the two-year span.

Table 1, about here

Paths of influence

The theoretical models were tested on the covariance matrix using using structural equation modelling techniques (LISREL 8.20, Jöreskog & Sörbom, 1998). The following indexes were used to evaluate model fit: (a) the chi-square statistic (it must be non-significant); (b) the goodness-of-fit index (GFI) and (c) the adjusted goodness-of-fit index (ACFI) both with values of .90 or above (Bentler & Bonnett, 1980); (c) the root mean square error of approximation (RMSEA) with value of .05 or less.

The results of the structural equations of perceived parenting style influences on adolescents' autonomy model are presented in Figure 1. Data indicates that the goodness of fit indices did not fit well. These yielded a significant χ^2 =1101.80, p = .000, df = 8, a GFI of .61, an Adjusted Goodness-of-Fit Index of .23 and a RMSEA of .40. However, all of the path coefficients are significant in terms of their t-values. The results suggest that perceived parental warmth is both a correlate and a contributor to autonomy with a more important contribution to autonomy at *time 2*. Psychological autonomy granting presents the same pattern with a less important contribution to autonomy at *time 2*.

Figure 1, about here

Concerning the parental involvement in schooling influence on adolescents' autonomy model, the goodness of fit indices showed an unsatisfactory fit with a significant χ^2 =1821.74, p = .000, df = 16, a GFI of .61, an Adjusted Goodness-of-Fit Index of .12 and a RMSEA of .40. Figure 2 reports significant values for all path coefficients except for daily interactions on school matters and autonomy. Results indicate that affective support and parent-adolescent communication are more a correlate of autonomy than a contributor to it.

Figure 2, about here

Based on the modification indices, some error terms between the variables were allowed to be correlated to improve both models. The modified models presented in Figure 3 demonstrated good fit with the data. The parenting style model yielded a nonsignificant chi-square of χ^2 =5.23 ns, p = .000, df = 3, a GFI of 1.00, an AGFI of .98 and a RMSEA of .03. Perceived parental warmth at *time 1* contributed to the adolescents' autonomy *time 2* which in turn was strongly correlated to autonomy at *time 2*. Likewise, the improved parental involvement in schooling model indicated a good fit with a nonsignificant χ^2 =1.66 ns, df = 1, a GFI of 1.00, an AGFI of .98 and a RMSEA of .03. Whereas autonomy *time 1* and autonomy *time 2* presented a saturated model χ^2 =0.00 ns, with a perfect fit.

Figure 3, about here

DISCUSSION

The primary objective of the present study was to investigate age-differences in adolescents' level of autonomy and in perceived parenting style and parental involvement in schooling behaviors. On whole, in agreement with similar research (e.g., Greenberger, 1984; Steinberg & Silverberg, 1986), our results indicate higher levels of autonomy, and more specifically of work orientation and self-reliance as adolescents grow older. In other words, older adolescents describe themselves as being more hard-workers, more persistent and as having more pleasure in work as well as having more initiative, a greater sense of control and no excessive dependence on others that younger ones. In line with recent works (e.g., Meeus, Iedema, Helsen, & Vollebergh, 1999; Van Hoof, 1999; Waterman, 1999), their identity level remained stable.

Concerning perceived parenting and parental involvement behaviors, consistent with previous findings (e.g., Linver & Silverberg, 1997; Paulson & Sputa, Lee, 1994), older adolescents mainly reported less parental warmth, more psychological autonomy granting, lower parent-school communication (i.e., less parental attendance at a school meeting and less talking to other parents about school).

The second objective of the current work was to verify the direction of influence between parenting and parental involvement behaviors and adolescents' autonomy. Hypotheses based

on the goodness of fit of both models were not supported. However, the study supported the use of the goodness of fit models as a means of providing empirical evidence that parenting behaviors (i.e., warmth and psychological autonomy granting) and parental involvement in schooling behaviors (affective support and parent-adolescent communication) both precede and contribute to adolescents' development of autonomy. Put in concrete words, adolescents who perceive their parents as being affectionate and as encouraging the expression of their individuality are more likely to become autonomous. Likewise, adolescents who describe their parents as giving them encouragement, praise, as attending school as audience, helping them with homework when asked and discussing about courses to choose are also more likely to become autonomous over time.

Examination of the path coefficients in the two models show significant links leading to a potential reciprocal nature of the relationships between parenting and parental involvement behaviors and adolescents' autonomy. Most likely, adolescents autonomy not only results from higher parental warmth, psychological autonomy granting, affective support and parent-adolescent communication but also contributes to evoke these parental behaviors.

As Steinberg et al. (1989) suggested, our findings provide evidence of different patterns of relationship between parenting and parental involvement behaviors and autonomy. For example, parental warmth at the secondary three level (equivalent to freshman year) is twice as important in predicting adolescents' autonomy as parental warmth at the secondary two level (middle years) is. Parental warmth and psychological autonomy granting during the middle years (time 1) seem to enhance the development of autonomy during those years, which then appears to evoke parental warmth and psychological autonomy granting at the secondary three level (freshman year). At the higher school level, parental warmth, that is, loving, responsive and involved parenting, is more likely to contribute to autonomy than autonomy is likely to evoke parental warmth. On the contrary, psychological autonomy granting is more likely to result from autonomy than to lead to it. In concrete terms, parents of highly autonomous freshmen adolescents are more likely to respond to their adolescents' development level by increasing their encouragement in expressing individuality within the family and by employing noncoercive democratic discipline than psychological autonomy granting is likely to provoke adolescents' autonomy.

In regard to parental involvement in schooling behaviors, path coefficients show that high levels of adolescents' autonomy in the middle years are more likely to evoke parental affective support and parent-adolescent communication (i.e., talk about current events or a TV show,

talk about the adolescent's future and help with time and responsibilities management) in the freshman year. Thus, at the high school level, parents respond to adolescents' greater levels of autonomy by offering more affective support and by communicating more frequently with them. In return, their practices also contribute, but at a lesser degree, to autonomy development.

It is important to note that our findings are not without any limitations. A first limitation is related to the use of adolescents' self-reports. There is no way to confirm whether parents would have given the same ratings as adolescents rated them to be. However, as Steinberg and his colleagues suggested (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994), information on how adolescents subjectively perceive their parents behaviors might be just as reliable as objective measures. A second limitation has to do with the non-random characteristic of the sample. In fact, the generalizability of our results are constrained by the homogeneity of our sample, even though the data came from five different schools, both rural and city schools. A final limitation is linked to the proposed models that failed to include an exhaustive number of parameters. This could be an explanation for the models inadequate fit for the empirical data.

CONCLUSION AND IMPLICATIONS

In conclusion, these findings are in line with developmental literatures that suggest age-differences in autonomy levels. Freshmen students describe themselves as being more motivated to work hard and to strive for success (work-orientation) and as having more initiative and a greater sense of responsibility (self-reliance) than middle grades students. They also perceive their parents as being less warm and less affectionate and as attending school meetings less frequently than middle school parents. On the other hand, high school parents provide more psychological autonomy granting (time 2) than parents of middle grades students (time 1). They also tend to discuss more often with their adolescents about their future or about current events. The modified models that showed a good fit for the data revealed that parental warmth, psychological autonomy granting and affective support in the middle grades are antecedents to adolescents' autonomy at the high school level. Thus, early parental warmth, psychological autonomy granting and affective support leads to greater autonomy one-year later. At the high school level, parents seem respond to greater autonomy by providing more warmth and acceptance, more psychological autonomy and more affective support (i.e., encouragement, praise, help with homework, discussion about courses to take and attendance at school as audience). As it has been argued, socialization is seen as a

mutually interactive process with both child and parents seeking to reduce and stimulate the behavior of the other (Sanson & Rothbart, 1995). Our findings lend support to the influence of adolescents' developmental change on family relationships over a two-year period.

A follow-up of the same participants in a three-year longitudinal study, which is currently in progress, will permit us to verify the bidirectional process of influence of parenting and parental involvement behaviors on adolescents' autonomy. Future research should also allow more error terms between the variables to be correlated to improve the theoretical models to be tested in terms of their fitness of good for the data.

The findings demonstrated the effects of early parenting style and parental involvement practices on the development of subsequent adolescents autonomy levels. They provide evidence of the importance of fostering family-school partnerships early in the school experience of adolescents.

REFERENCES

Bell, R. Q. (1968). A reinterpretation of the direction of effects in studies of socialization. *Psychological Review*, 81-95.

Bell, R. Q. (1974). Contributions of human infants to caregiving and social interaction. In M. Lewis & L. A. Rosenblum (Eds.), *The effect of the infant on its caregiver* (pp. 1-20). New York: Wiley.

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development 55*, 83-96.

Bentler, P. M., & Bonnett, D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin, 88*, 588-606.

Bugental, D. B., & Goodnow, J. J. (1998). Socialization processes. In W. Damon and N. Eisenberg (Eds), *Handbook of Child Psychology* (pp. 389-462). New York : John Wiley & Sons, Inc.

Connors, L. J. et Epstein, J. L. (1995). Parents and schools. In M. Bornstein (Ed.), *Handbook of parenting*. Hillsdale NJ: Lawrence Erlbaum, 437-458.

Deslandes, R. (1996). *Collaboration entre l'école les familles: Influence du style parental de la participation parentale sur la réussite scolaire au secondaire*. Unpublished doctoral dissertation. Laval University, Québec, Canada.

Deslandes, R. (1998-2001). *L'autonomie de l'adolescent et les interactions parents-adolescents en lien avec la réussite scolaire*. Grant from the Social Sciences and Humanities Research Council of Canada.

Deslandes, R. (2000) Relationships between student development, student gender and student support for family-school partnerships at the secondary level. *Symposium : Perspectives on parental involvement in education: The perspectives and contributions of multiple stakeholders*. Communication présentée au 2000 AERA Annual Meeting, New Orleans, Louisiane.

Deslandes, R., Bertrand, R., Royer, É., & Turcotte, D. (1995). Validation d'instruments de mesure du style parental et de la participation parentale dans le suivi scolaire. *Mesure et Évaluation en éducation, 18*, 63-79.

Deslandes, R., Leclerc, D. et Dumont, M. (2000). *Analyse confirmatoire du style parental, de la participation parentale de l'autonomie de l'adolescent.* Manuscript in preparation. Université du Québec à Trois-Rivières.

Deslandes, R., & Potvin, P. (1999). *Autonomy, Parenting, Parental Involvement in Schooling and School Achievement: Perception of Quebec Adolescents.* 1999 AERA Annual Meeting. ERIC Document Reproduction Service No. ED430697.

Deslandes, R., Potvin, P., & Leclerc, D. (1999). Validation québécoise de l'échelle de l'autonomie de l'adolescent. *Science et Comportement, 27* (1), 37-51.

Deslandes, R., Potvin, P. et Leclerc, D.(in press). Les liens entre l'autonomie de l'adolescent, la collaboration parentale et la réussite scolaire. *Revue Canadienne des Sciences du Comportement.*

Deslandes, R., Royer, É., Turcotte, D., & Bertrand, R. (1997). School achievement at the secondary level: Influence of parenting style and parent involvement in schooling. *McGill Journal of Education, 32*, 191-207.

Epstein, J. L. (1996). Perspectives and previews on research and policy for school, family, and community partnerships. In A. Booth and J. Dunn (Eds.), *Family-School Links: How do they affect educational outcomes?* Hillsdale, NJ : Lawrence Erlbaum Associates.

Epstein, J. L., Connors, L. J., & Salinas, K. C. (1993). *High School and Family Partnerships: Questionnaires for Teachers, Parents, and Students.* Baltimore, Md: Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning.

Greenberger, E. (1982). Education and the acquisition of psychosocial maturity. In D. McClelland (Ed.), *The Development of Social Maturity* (pp. 155-189). New York : Irvington.

Greenberger, E. (1984). Defining psychosocial maturity in adolescence. In P. Karoly and J. J. Steffen (Eds.). *Adolescent behavior disorders: Foundations and contemporary concerns.* Lexington, MA: D.C. Heath.

Greenberger, E., Josselson, R., Knerr, C., & Knerr, B. (1975). The measurement and structure of psychosocial maturity. *Journal of Youth and Adolescence, 4* (2), 127-143.

Greenberger, E., & Sorensen, A. B. (1974). Toward a concept of psychosocial maturity. *Journal of Youth and Adolescence, 3* (4), 329-358.

Jöreskog, K., & Sörbom, D. (1998). *LISREL 8.20: A guide to the program and applications.* Chicago: SPSS Inc.

Lamborn, S. D., Mounts, N. S., Steinberg, L., et Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglecful families. *Child Development, 62* 1049-1065.

Lee, S. (1994). *Family-School Connections and Students' Education: Continuity and Change of Family Involvement from the Middle Grades to High School.* Dissertation, Doctor of Philosophy, The Johns Hopkins University, Baltimore, Maryland.

Linver, M. R., & Silverberg, S. B. (1997). Maternal predictors of early adolescent achievement-related outcomes : Adolescent gender as moderator. *Journal of Early Adolescence, 17* (3), 294-318.

Mantzicopoulos, P. Y., & Youngjoo, O-H. (1998). The relationship of psychosocial maturity to parenting quality and intellectual ability for American and Korean adolescents. *Contemporary Educational Psychology, 23*, 195-206.

Meeus, W., Iedema, J., Helsen, M., & Vollebergh, W. (1999). Patterns of adolescent identity development: Review of literature and longitudinal analysis. *Developmental Review 19*, 419-461.

Paulson, S. E. et Sputa, C. L. (1996). Patterns of parenting during adolescence: Perceptions of adolescents and parents. *Adolescence 31* (122), 369-381.

Sanson, A., & Rothbart, M.K. (1995). Child temperament and parenting. In M. Bornstein (Ed.), Handbook of parenting. Hillsdale NJ: Lawrence Erlbaum, 299-321.

Shumacker, R. E., & Lomax, R. G. (1996). *A beginner's guide to structural equation modeling*. NJ: Lawrence Erlbaum Associates.

Steinberg, L., Elmen, J. D., & Mounts, N. S. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development, 60*, 1424-1436.

Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement : Authoritative parenting, school involvement, and encouragement to succeed. *Child Development, 63*, 1266-1281.

Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 65*, 754-770.

Steinberg, L., & Silverberg, S. B. (1986). The vicissitudes of autonomy in early adolescence. *Child Development, 57*, 841-851.

Van Hoof, A. (1999). The identity status field re-reviewed: An update of unresolved and neglected issues with a view on some alternative approaches. *Developmental Review 19*, 497-556.

Waterman, A. S. (1999). Issues of identity formation revisited: United States and the Netherlands. *Developmental Review 19*, 462-479.

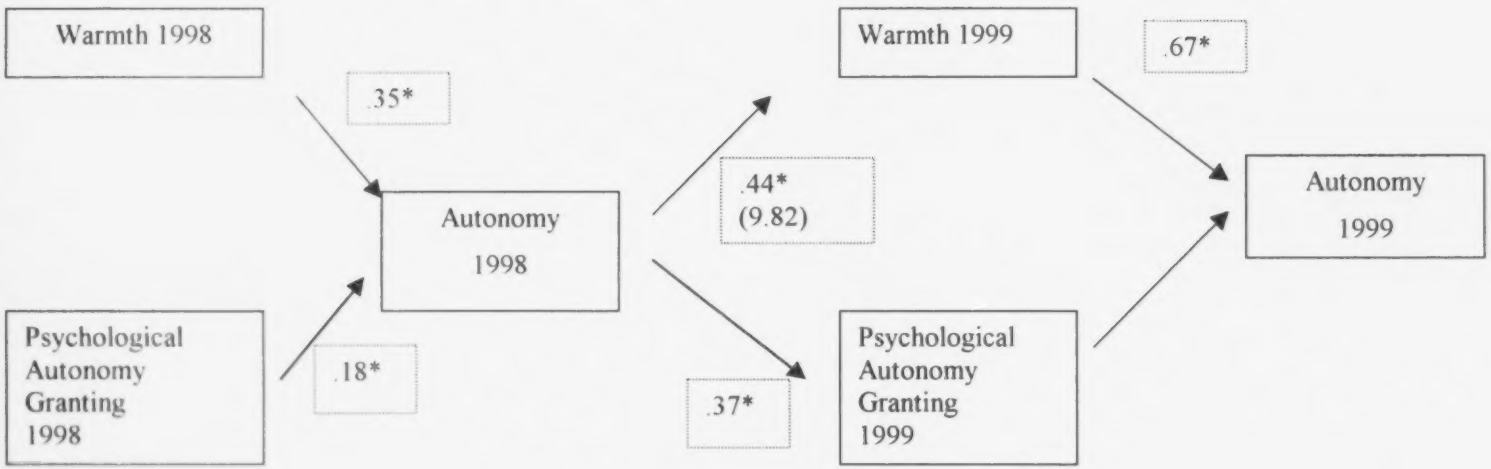
Table 1

Means and Standard Deviations and Paired Sample *t*-Tests

Variables	Time 1	Time 2	*p*
Autonomy	3.05 .43	3.12 .40	.000
Work orientation	2.70 .62	2.78 .59	.000
Self-reliance	3.15 .50	3.26 .45	.000
Identity	3.31 .54	3.33 .51	ns
Parenting style			
Supervision	2.07 .44	2.10 .43	.025
Warmth	3.22 .49	3.15 .48	.000
Autonomy granting	2.72 .56	2.77 .52	.003
Parental Involvement in Schooling			
Affective support	2.61 .62	2.57 .62	.042
Communication with the teachers	1.67 .53	1.70 .52	ns
Daily interactions on school matters	2.85 .59	2.81 .64	.050
Parent-school communication	1.79 .46	1.64 .47	.000
Parent-adolescent communication	2.03 .57	2.07 .53	.021

Figure 1

Theoretical Path-Analytic Model. Parenting Style Influences on Adolescents' Autonomy



$\chi^2 = 1101.80^{***}$ $df=8$
GGI = .71
AGFI = .23
RMSEA= .40

Figure 2

Theoretical Path-Analytic Model. Parental Involvement in Schooling Influences on Adolescents' Autonomy

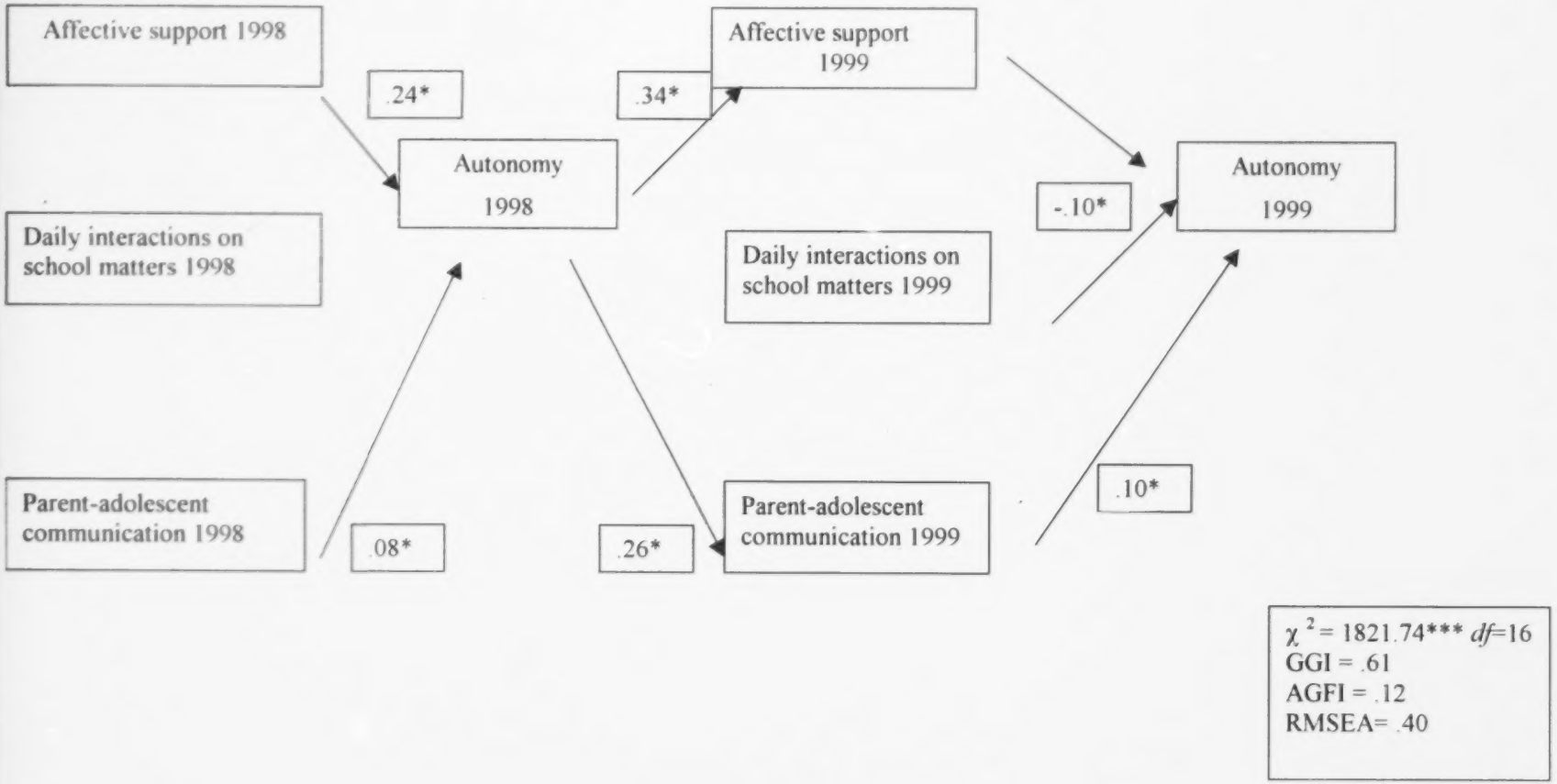
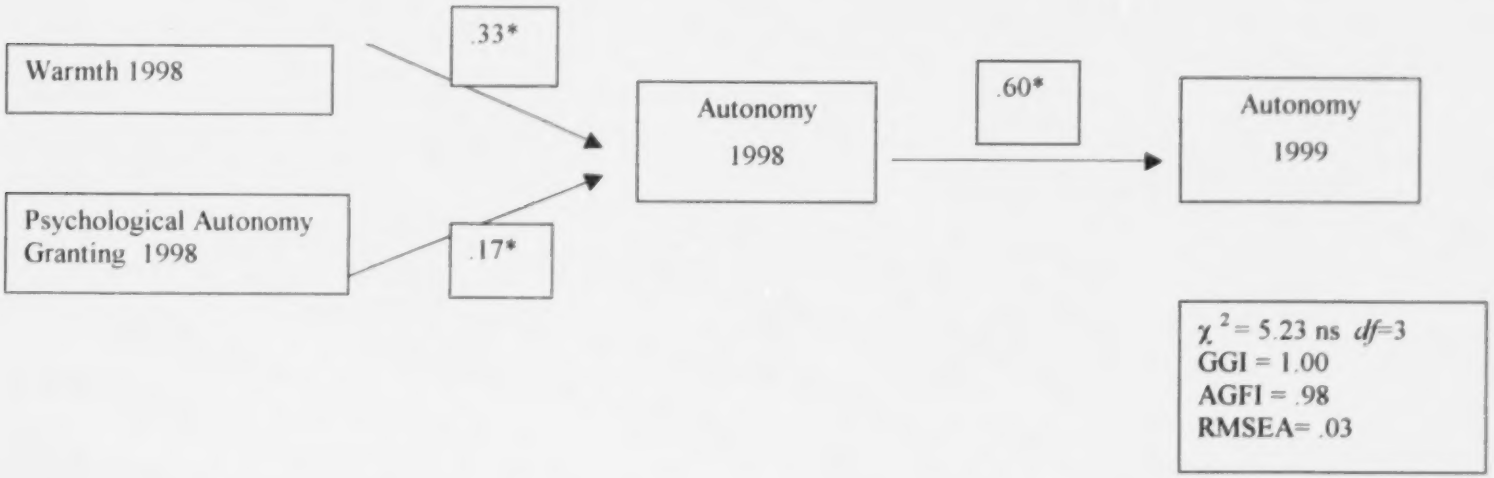


Figure 3

Parenting Style and Parental Involvement Influences on Adolescents' Autonomy

Parenting Style



Parental Involvement in Schooling